HAITI

COUNTRY PROFILE

**IMPLEMENTATION OF AGENDA 21:
REVIEW OF PROGRESS MADE SINCE THE
UNITED NATIONS CONFERENCE ON
ENVIRONMENT AND DEVELOPMENT, 1992**

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Division for Sustainable Development
The Information contained in this Country Profile is also available on the World Wide Web, as follows:
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HAITI

This country profile has been provided by:

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All statistics are rendered as provided by the respective Governments.

TABLE OF CONTENTS

		Page
ACRONYMS		iii
OVERVIEW		v
FACT SHEET		vii
AGENDA 21 CHAPTERS		
2.	International cooperation to accelerate sustainable development in developing countries and related domestic policies	1-2
3.	Combating poverty	3-4
4.	Changing consumption patterns	5-8
5.	Demographic dynamics and sustainability	9-10
6.	Protecting and promoting human health	11-12
7.	Promoting sustainable human settlement development	13-14
8.	Integrating environment and development in decision-making	15-16
9.	Protection of the atmosphere	17-18
10.	Integrated approach to the planning and management of land resources	19-20
11.	Combating deforestation	21-22
12.	Managing fragile ecosystems: combating desertification and drought	23-24
13.	Managing fragile ecosystems: sustainable mountain development	25-26
14.	Promoting sustainable agriculture and rural development	27-28
15.	Conservation of biological diversity	29-30
16.	Environmentally sound management of biotechnology	31-32
17.	Protection of the oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, rational use and development of their living resources	33-38
18.	Protection of the quality and supply of freshwater resources: application of integrated approaches to the development, management and use of water resources	39-40
19.	Environmentally sound management of toxic chemicals, including prevention of illegal international traffic in toxic and dangerous products	41-42
20.	Environmentally sound management of hazardous wastes, including prevention of illegal international traffic in hazardous wastes	43-44
21.	Environmentally sound management of solid wastes and sewage-related issues	45-46
22.	Safe and environmentally sound management of radioactive wastes	47-48
23-32.	Major groups	49-54
33.	Financial resources and mechanisms	55-56
34.	Transfer of environmentally sound technology, cooperation and capacity-building	57-58
35.	Science for sustainable development	59-60
36.	Promoting education, public awareness and training	61-62
37.	National mechanisms and international cooperation for capacity-building in developing countries	63-64
38.	International institutional arrangements	65
39.	International legal instruments and mechanisms	66
40.	Information for decision-making	67-68

ACRONYMS

APELL	Awareness and Preparedness for Emergencies at Local Level
CFC	chlorofluorocarbon
CGIAR	Consultative Group on International Agriculture Research
CILSS	Permanent Inter-State Committee on Drought Control in the Sahel
EEZ	exclusive economic zone
ECA	Economic Commission for Africa
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
ELCI	Environmental Liaison Centre International
EMINWA	environmentally sound management of inland water
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
GAW	Global Atmosphere Watch (WMO)
GEF	Global Environment Facility
GEMS	Global Environmental Monitoring System (UNEP)
GEMS/WATER	Global Water Quality Monitoring Programme
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Pollution
GIPME	Global Investigation of Pollution in Marine Environment (UNESCO)
GIS	Geographical Information System
GLOBE	Global Legislators Organisation for a Balanced Environment
GOS	Global Observing System (WMO/WWW)
GRID	Global Resource Information Database
GSP	generalized system of preferences
HIV	human immunodeficiency virus
IAEA	International Atomic Energy Agency
IAP-WASAD	International Action Programme on Water and Sustainable Agricultural Development
IARC	International Agency for Research on Cancer
IBSRAM	International Board of Soil Resources and Management
ICCA	International Council of Chemical Associations
ICES	International Council for the Exploration of the Sea
ICPIC	International Cleaner Production Information Clearing House
ICSC	International Civil Service Commission
ICSU	International Council of Scientific Unions
IEEA	Integrated environmental and economic accounting
IFAD	International Fund for Agricultural Development
IGADD	Intergovernmental Authority for Drought and Development
IGBP	International Geosphere-Biosphere Programme (ICSU)
IGBP/START	International Geosphere-Biosphere Programme/Global Change System for Analysis, Research and Training
ILO	International Labour Organisation
IMF	International Monetary Fund
IMO	International Maritime Organization
INFOTERRA	International Environment Information system (UNEP)
IOC	Intergovernmental Oceanographic Commission
IPCC	Intergovernmental Panel on Climate Change
IPCS	International Programme on Chemical Safety
IPM	integrated pest management
IRPTC	International Register of Potentially Toxic Chemicals
ITC	International Tin Council
ITTO	International Tropical Timber Organization

ACRONYMS (Cont'd)

IUCN	International Union for Conservation of Nature and Natural Resources
MARPOL	International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PGRFA	plant genetic resources for agriculture
PIC	prior informed consent procedure
SADCC	South African Development Co-ordination Conference
SARD	sustainable agriculture and rural development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRO	Office of the United Nations Disaster Relief Coordinator
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNU	United Nations University
WCP	World Climate Programme (WMO/UNEP/ICSU/UNESCO)
WFC	World Food Council
WHO	World Health Organization
WMO	World Meteorological Organization
WWF	World Wide Fund for Nature (also called World Wildlife Fund)
WWW	World Weather Watch (WMO)

NATIONAL ACRONYMS

MOE	Ministry Of Environment
MOA	Ministry of Agriculture
MPH	Ministry of Public Health
MAS	Ministry of Social Affairs
NEAP	National Environmental Action Plan (French PAE)
GOH	Government of Haiti
EPPLS	Public Promotion Entreprise for Social Housing
TPTC	Transport and Public Works Ministry
FAN	Federation des amis de la nature (Friends of Nature Federation)
FREN	Federation pour la Regeneration de l'Environment National

OVERVIEW

The creation of the Environment Ministry in 1995 has at least brought Haiti closer to the Environmental arena. The next step to be taken is the vote on a legislative instrument or, the Ministry's "Organic Law". The preparation of a National Environmental Action Plan is the key element of the environmental process. It achieves two important objectives:

- Integrating Haiti into the environmental mainstream.
- Providing the government with a special tool for the sustainable development of the country.

Environmental indicators are being developed, in order to give an idea of the positive or negative changes occurring through the years.

ENVIRONMENTAL DIRECTIVES have been tentatively drawn up:

- for solid waste management;
- for industrial waste treatment;
- for air pollution reduction and
- for metal scrap disposal.

Codification of environmental legislation is proceeding with the assistance of international institutions.

FACT SHEET

NAME OF COUNTRY: HAITI

1. **Name of Key National Sustainable Development Coordination Mechanism(s)/Council(s).**

The Ministry of the Environment coordinates sustainable development issues.

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2. Membership/Composition/Chairperson: Carlo Lafond, Ing.-Gest. Tel. 45-0635

2a. List of ministries and agencies involved:
- Ministry of the ENVIRONMENT
- Ministry of AGRICULTURE
- Ministry of TOURISM

2b. **Names of para-statal bodies and institutions involved, as well as participating of academic and private sector bodies:**
- Friends of Nature Federation (FAN)
- Federation for Regeneration of Nature (FREN)
- State University of Haiti (Faculty of Sciences and INAGHE)
- Private University: Quisqueya University

2c. **Names of non-governmental organizations involved:**
- Caribbean Housing (CHF)
- Pan American Development Foundation (PADF)

3. **Mandate/role of above mechanism/council:**
The mandate is to establish norms, to preapre guidelines for environmental impact assessments (EIA), to establish standards for garbage dumps, for air, water adn soil pollution prevention and abatement, to give advice or formulate opinions on projects affecting the environment.

4. **If available, attach a diagram (organization chart) showing national coordination structure and linkages between ministries:**
-Provided

HAITI

AGENDA 21 CHAPTER 2: **INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES (with special emphasis on TRADE)**

NATIONAL PRIORITY: **VERY HIGH**

STATUS REPORT: The Haitian Governments, since the 1992 United Nations Conference on Environment and Development, have been working toward fulfilling the principles of RIO. International cooperation has been vital in realizing these important steps:

- The creation of the Ministry of Environment in 1995
- The preparation of a National Environmental Action Plan (NEAP) which will be ready by the end of 1997.
- The drafting, the final revision and the vote of the Ministry's Organic Law, which is set as a priority for 1997.
- The vote and ratification, after proper lobbying, of four key conventions: those on Biodiversity, Climate Change, Hazardous Wastes and Marine Pollution.
- The drafting of Environmental Impact Studies criteria for construction of infrastructure projects.
- The implementation of education related to environment (ERE).

Cross-Sectoral Issues

1. **Decision-Making Structure:** The NEAP will outline the government's policy on trade and environment.

2. **Capacity-Building/Technology Issues:** The GOH and the Ministry of Environment have been looking for human and technological resources.

3. **Major Groups:** NGOs, ecological groups and local communities (so-called "Territorial municipalities") are the major groups called upon to participate in the NEAP process.

4. **Finance:** Means of financing will be identified as part of the definition of specific projects to be funded.

5. **Regional/International Cooperation:** The UNCED, since 1992, has established caribbean and international cooperation tools for a less developed country like Haiti.

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 3: COMBATING POVERTY

NATIONAL PRIORITY: **VERY HIGH**

STATUS REPORT:

- Focus of national strategy

Since the restoration of democracy in Haiti, creation of jobs has been a key element.

A number of labor intensive projects have been realized since October 1994.

- Highlight activities aimed at the poor and linkages to the environment

Through an NGO like PADF, labor intensive projects have been undertaken (street cleaning, tree planting and erosion control projects).

The supply of potable water is expanding especially at Cite Soleil, the largest city slum in Haiti. Construction of latrines has been realized by other NGOs.

The main institution created especially to implement this national strategy has been the Central Managing Unit (UCG in French).

PURE I, a World Bank job creation project has injected more than 40 million US dollars into the economy through various construction projects.

PURE II, starting in 1997, has a US$50 million budget for the coming years.

Cross-Sectoral Issues

1. Decision-Making Structure: Besides the Ministry of Social Affairs which takes care of labor problems in Haiti, the communities take care of so-called "Communal asylums" where old people find their retirement home.

2. Capacity-Building/Technology Issues: Labor intensive projects have been designed to build up human resources and low-cost technology resources in Haiti.

3. Major Groups: NGOs are the most important groups in this field, but their contributions should be coordinated in the GOH.

4. Finance: IGOs have been very influential in providing adequate funding. The World Bank has financed the main job creation projects, called PURE I and PURE II.

5. Regional/International Cooperation: Bilateral (caribbean, latin-american and european agencies), and multilateral (World Bank and IDB) organizations are the main source of cooperation in this fight against poverty.

STATISTICAL DATA/INDICATORS

	1985	1990	1992	Latest 1994/5
Unemployment (%)		50-80%*		
Population living in absolute poverty		75.5%		
Public spending on social sector %				40%

Other data: In Haiti, disguised unemployment is an emportant element in the informal sector, in street services.

* In 1990, the Department of Labor put the unemployment level at 80%. The actual range (50% to 80%) accounts for the disguised unemployment which is so prevalent in the informal sector (streeet vendors, etc)

AGENDA 21 CHAPTER 4: CHANGING CONSUMPTION PATTERNS

NATIONAL PRIORITY:

STATUS REPORT:

- **National policy objectives/focus**

1. Promote consumption and production in such a way to lower environmental pollution and answer the basic needs of the haitians.

2. Understand the haitian consumption patterns and the new trends.

3. Sensitize consumers regarding the impact of waste production; encourage recycling through composting or reusing.

4. System of taxation for energy consumption (Kerosene or better charcoal ovens, etc.)

5. Sensitization of the public at large about the amount of waste produced by plastic containers.

- **National targets**

1. Reception of international help to focus on environmental impact of plastic containers.

2. Reduction of waste production.

3. Presentation of the role of haitian women as the pillars of the haitian economy.

4. To increase the consumption of vegetables, green legumes and fibers.

5. Action on the rich through waste reduction or through the diminution of plastic consumption. Action on the poor, on their demand, on health concerns, lodging, education.

6. Promotion of cooking habits by improving fuel consumption (wood, charcoal and kerosene) and promoting the use of energy-efficient cookers.

Cross-Sectoral Issues

1. **Decision-Making Structure:** No information

2. **Capacity-Building/Technology Issues:** No information

3. **Major Groups:** No information

4. **Finance:** No information

5. **Regional/International Cooperation:** No information.

STATISTICAL DATA/INDICATORS

	1985	1990	1992	Latest 199_	
GDP per capita (current US$)				304	
Real GDP growth (%)					
Annual energy consumption per capita (Kg. of oil equivalent per capita)					
Motor vehicles in use per 1000 inhabitants				60	
Other data					

Government policies affecting consumption and production.

1. Goals and Agents (Stakeholders)

Indicate with a (X) those agents which your Governments policies are meant most to influence.

Agents / Goals	Producers	Local authorities	Central Government	Households	Civil society
Material efficiency	X	X	X	X	X
Energy efficiency:					
Transport		X	X		X
Housing	X	X	X	X	X
Other:Cooking	X			X	X
Waste:					
Reduce	X	X	X	X	X
Reuse	X	X	X	X	X
Recycle	X	X	X	X	X

Comments: Since transportation is the main source of energy consumption in Haiti, it should be noted that foreign producers could be influenced through international institutions to increase the octane for better car mileage. The households and the civil society could be influenced through sensitization and incentives toward better automobile care and support to mechanical repair.

As for waste management in Haiti, all phases of production and treatment of solid waste from domestic origin, the main source of urban waste should be studied. Since 15% of the solid wastes are of organic matter, recycling becomes feasible.

Consumption and recycling of plastic waste is also a key ingredient of government policies.

2. Means & Measures and Agents (Stakeholders)

Indicate with an (R) those agents who assume primary responsibility for any of the policy measures indicated; indicate with an (I) the agents for which the impact is expected to be especially significant.

Means & Measures / Agents	Producers	Local authorities	Central Government	House-holds	Civil Society
Improving understanding and analysis					
Information and education (e.g., radio/TV/press)			R		I
Research	R			I	
Evaluating environmental claims					
Form partnerships	I	R			
Applying tools for modifying behaviour					
Community based strategies		R		I	
Social incentives/disincentives (e.g., ecolabelling)	I		R		
Regulatory instruments			R		I
Economic incentives/disincentives	I		R		
Voluntary agreements of producer responsibility for aspects of product life cycle	I		R		
Provision of enabling facilities and infrastructure (e.g., transportation alternatives, recycling)			R		I
Procurement policy			R		I
Monitoring, evaluating and reviewing performance					
Action campaign		R			I
Other: Preparation of Environmental Impact Studies			R		I

Comments: Since the MOEs primary duty is a normative one, it will be the responsibility of the GOH to make sure proper enforcement of the Norms taken as Public Laws. The role of the Parliament voting the right enforcement measures, the role of the National Police, and that of the Ministry of Justice will become vital.

AGENDA 21 CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

NATIONAL PRIORITY:

STATUS REPORT:

The Government considers that the population growth and fertility levels are too high. The Governments intervention in these areas is directed at lowering both the rate of growth and fertility levels.

Port-au-Prince, as the fastest growing town in the country, faces the toughest ecological and population problems.

The largest towns are subjects of studies on solid waste, dumping sites and for cemetery relocations and population explosion.

The female population is the target of many programs in health.

Since Haiti's population has reached seven (7) million, not including the two (2) million living overseas, proper demographic information shall be gathered. The most dynamic regions in terms of population should be the object of official census.

The local population, which has been made a key part of the environmental planning process, is the target of demographic measures to lower the fertility rate and reduce the growth of the haitian population.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The Ministry of Public Health and Population (MPHP) is in charge of population matters and family planning.

2. **Capacity-Building/Technology Issues:** The Institute of Statistics and Informatics takes care of the Census data and the population statistics.

3. **Major Groups:** The Division of Planning within the MPHP articulates the demographic priorities of the government.

4. **Finance:** The WHO and PAHO furnish the finances that supplement the GOHs development budget. Some NGOs also intervene in population issues.

5. **Regional/International Cooperation:** PAHO and WHO have been the cooperating institutions in this domain for the past 50 years.

STATISTICAL DATA/INDICATORS

	1990	1993	Latest 199_	
Population (Thousands) mid-year estimates			7,500	
Annual rate of increase (1990-1993)			2.1%	
Surface area (Km^2)			27,750	
Population density (people/Km^2)			270*	

Other data: * The population density for Port-au-Prince is more than three times the national average with two (2) million people crowded in the metropolitan area.

AGENDA 21 CHAPTER 6: PROTECTING AND PROMOTING HUMAN HEALTH

NATIONAL PRIORITY:

STATUS REPORT:

Haiti, as a poor country is characterized by the lowest satisfaction of basic needs. Very weak provision of human health is a key measure of the country's poverty.

The implementation of the "Health for all by the year 2000" Strategy since 1980 and the National Public Health Plan of 1996 are new elements for working toward Human Development in Haiti. Public awareness of the AIDS problem has been realized through TV sports and radio messages.

Promotion of intersectoral cooperation for preventive health, improvement of health care services, creation of local health centers in every commune, management of health care, public environment through the "territorial municipalities" are key objectives. While, in rural areas the population depends on both governmental health care and on the NGOs with their community health involvement, in the cities, people have access to State services and private services, for example, in Port-au-Prince, some NGOs maintain hospitals for children.

Cross-Sectoral Issues

1. Decision-Making Structure: The Ministry of Public Health (MPH) makes the MOE a partner in asking its advice on the environmental safety of certain new products.

2. Capacity-Building/Technology Issues: The MOE, as well as its partners, the MPH and the Ministry of Commerce have no real human and financial resources for capacity building. The best available technology comes from the Ministry of Agriculture's laboratories but it can only perform routine tests. Most of the tests are sent to Miami laboratories.

3. Major Groups: In the public health field, NGOs from all over the world are very important.

4. Finance: Although no actual figures on health expenditure by the NGOs exist, it is believed that they account for most of the investment in the health sector.

5. Regional/International Cooperation: PAHO accounts for most of the international cooperation in the health sector. WHO and PAHO work together in Haiti, within the same office, but they have specific fields of intervention.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 199_
Life expectancy at birth Male Female			 54,5 58,3
Infant mortality (per 1000 live births)			76
Maternal mortality rate (per 100000 live births)			600
Access to safe drinking water (% of population)			39%
Access to sanitation services (% of population)			50%
Other data			

AGENDA 21 CHAPTER 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT:

The very low percentage of public funds allocated to housing in Haiti is a sign of the small importance given to this sector. Consequently a lot of funding is requested from international organizations for this field.

A public enterprise named EPPLS has the objective of developing Social Housing. The NEAP under development in the Ministry will devote some adequate recommendations on this social matter with so many environmental implications.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The Ministry of Social Affairs (MSA) is the official entity in charge of the important social problem of housing. It is supported by other ministries like the Ministry of Environment given the implications of slum development and the Ministry of Commerce and Industry for expansion.

2. **Capacity-Building/Technology Issues:** Appropriate housing technologies shall be developed so as to allow the use of adequate roofing materials, sound proofing, water-heating and low-cost housing.

3. **Major Groups:** Within the MSA, a division exists --the EPPLS or Social Housing Promotion and Planning Institute- which is the key institution dedicated to housing problems and particularly to slum regeneration.

4. **Finance:** Finances for an organizational division like EPPLS are obtained through UNDP, HABITAT and other bilateral funding.

5. **Regional/International Cooperation:** The UNDP and HABITAT are the main institutions for cooperation on this matter.

STATISTICAL DATA/INDICATORS

	1990	1995	
Urban population in % of total population		32.6	
Annual rate of growth of urban population (%)		4.5%	
Largest city population (in % of total population)		25%	
Other data			

AGENDA 21 CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT IN DECISION-MAKING

(See pages vii and viii at the beginning of the profile)

NATIONAL PRIORITY: **VERY HIGH**

STATUS REPORT:

The integration of environment concerns in Haiti's development planning is a key element in the NEAP being prepared in the Ministry of the Environment. Since the appropriate theme is still in its primary stage, only the general outlines are adapted to the specific haitian socio-cultural situation:

a. Establish national strategies whereby social, economic and environmental consideration due importance in Haiti.
b. Improve the Global Imaging Systems (GIS) in Haiti.
c. Develop socio-economic indicators for measuring social, economic and environmental changes.
d. Strengthen broad educational and professional curricula for a national environment-related-education (ERE). Extend these basic principles to the public-at-large.
e. Establish a legal and institutional framework which incorporates international conventions into the national juridic spectrum.

Cross-Sectoral Issues

1. Decision-Making Structure (please also refer to the fact sheet): The Ministry of the Environment is the main structure for making decisions on this topic.

2. Capacity-Building/Technology Issues: The MOEs limited governmental resources make the Ministry dependent on international support for capacity building.

3. Major Groups: The new "local communitities" sanctioned by recent legislation will play a key role.

4. Finance: No special finance is foreseen in the current budget. However, the municipalities and the collectives will make do. In the meantime, most of the financial facilities of the MOE come from international funding.

5. Regional/International Cooperation: The GOH cooperates with the Dominican Republic and with all the caribbean countries. Regional cooperation includes Venezuela and Peru. The cooperation includes exchange of information, technical assistance and provision of equipment.

Aside from this, Haiti receives cooperation from OLADE and from the European Economic Commission.

AGENDA 21 CHAPTER 9: PROTECTION OF THE ATMOSPHERE

NATIONAL PRIORITY:

STATUS REPORT:

The Montreal Protocol and its Amendments has not been signed.

The United Nations Framework Convention on Climate Change has not been signed.

Additional comments relevant to this chapter

Although the biggest atmospheric offense is air pollution by non-stationary sources, the Ministry of Environment (MOE) shall act within its limited resources. It will implement the NEAP with protection of the atmosphere as its main theme and it will fight for the integration of Haiti into the international framework for climate change. It will lobby for the signing and ratification of the appropriate convention and its application.

Cross-Sectoral Issues

1. Decision-Making Structure: The MOE is in charge of atmospheric protection. But since, in Haiti, this problem is mainly due to pollution from vehicles, it is likely that some enforcement will be needed from the National Police Force through the Ministry of Justice.

2. Capacity-Building/Technology Issues: The Government of Haiti does not have neither the means to establish early or current detection systems, nor the capacity for developing research or observations/assessment on atmospheric pollution. The MOE policy for building appropriate capacity is threefold:

a. Strengthening the institution through hiring of competent technicians and consultants.
b. Taking advantage of all specialization opportunities overseas.
c. Adapting some less sophisticated but safe technology to the country's limited resources.

In order to receive the Best Available Technology that would fit the financial resources (recurring costs) of a LDC, Haiti has to rely on international cooperation.

3. Major Groups: The ecological groups like FAN, FREN and COHPEDA, etc are getting involved in public sensitization regarding atmospheric pollution.

4. Finance: Very small amounts of funding are available from national sources. Mostly NGOs and UNEP (through the GEF fund) are available. Haiti has financial problems to cope with the dues for International Organizations.

5. Regional/International Cooperation: The MOE has realized the depth of international cooperation on matters related to the protection of the atmosphere. The MOE keeps lobbying within the Parliament so that Haiti will ratify the Convention on Long-Range Transboundary Air Pollution.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 199-	
CO_2 emissions (eq. million tons)				
SO_x "				
NO_x "				
CH_4 "				
Consumption of ozone depleting substances (Tons)				
Expenditure on air pollution abatement in US$ equivalents (million)				
Other data				

AGENDA 21 CHAPTER 10: INTEGRATED APPROACH TO THE PLANNING AND MANAGEMENT OF LAND RESOURCES

NATIONAL PRIORITY:

STATUS REPORT:

The NEAP process under way in the Environment Ministry defines the haitian policies to insure the best land resource allocation for its sustainable management.

At different local and regional levels, the public participation through the use of the MARP process is guaranteed.

Cross-Sectoral Issues

1. Decision-Making Structure: The Organic Law of the Ministry is being reviewed to integrate the latest official guidelines on the ministry's role. The intersectoral relations of the Environment Ministry with other haitian institutions are being investigated. The Organic Law will then be submitted to the Parliament for its vote.

2. Capacity-Building/Technology Issues: Meanwhile the NEAP process in its final phase will integrate various objectives directly or indirectly related to the management and protection of natural resources in Haiti. Since land tenure is the most important element in the sustainable development of land resources, agrarian reform will play a key role in Haiti.

3. Major Groups: The local collectives will be the major groups participating in the planning and management of local resources. The National Institute for Agrarian Reform (INARA) will be consulted.

4. Finance: Local resources will be added to the funds provided by the Government.

5. Regional/International Cooperation: International cooperation in the area of land planning and management shall be investigated.

AGENDA 21 CHAPTER 11: COMBATING DEFORESTATION

NATIONAL PRIORITY:

STATUS REPORT:

One way to deal with desertification in Haiti is to protect its limited forestry reserves and one such project financed by the World Bank is the Technical Support for Park and Forest Protection (ATPPF in French).

Actions to increase forest productivity could be undertaken.

Land use surveys to identify land tenure and Agrarian Reform are two elements or facets of this institutional fight.

Land classification to be used in sensitizing the population should also be updated. In addition the ecological classification by Hkoldridge could be updated.

Information exchange is a key factor in this fight; new processes should be investigated.

Peoples participation is very relevant, due to the implementation of the law on "local collectives" dealing with decentralization.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The Ministry of Agriculture has been the key structure to make decisions on any forest protection related matters. Since Rio, guidelines related to forest management have been switched over to the environment sector. In Haiti, for the first time, this situation happened in the 1996 management of the forest ecosystem.

2. **Capacity-Building/Technology Issues:** The focus of the sector includes both wood production and new projects like ATPFF which calls for the technical support of parks and forests in Haiti. Together with the Ministry of Agriculture, the MOE will set proper guidelines for forest protection.

3. **Major Groups:** In 1996, the private sector, local communities ("collectivites locales"), non-governmental organizations, and local youth and women were the most active groups in environmental issues.

4. **Finance:** Governmental funding of the forestry sector and international aid from the World Bank and USAID have become the best sources of financing.

5. **Regional/International Cooperation:** The GOH supports the effective implementation of the non-legally binding authoritative statement of principles for a global consensus of the management, and sustainable development of all types of forest adopted by UNCED. Haiti has been proving though the MOE its willingness to promote the implementation of the commitments made at the Rio Conference.

STATISTICAL DATA/INDICATORS

	1985	1990	Latest 199-	
Forest Area (Km^2)				
Protected forest area				
Roundwood production (solid volume of roundwood without bark in mill m^3)				
Deforestation rate (Km^2/annum)				
Reforestation rate (Km^2/annum)				
Other data				

AGENDA 21 CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

NATIONAL PRIORITY:

STATUS REPORT:

International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification Particularly in Africa was ratified in 1996.

The MOE has not filed a report as yet, but with the ratification of the Convention in 1996 such a report will be forthcoming. The MOE has been preparing request for proper assistance in this regard.

Additional comments relevant to this chapter

Haiti, as the poorest country in the hemisphere, has known some ecological disaster. Being a mountainous country, Haiti is a typical case of a fragile ecosystem, subject to both desertification and drought. Only 2% of wooded areas are left from land that was completely wooded 500 years ago.

Cross-Sectoral Issues

1. Decision-Making Structure: The Ministry of Environment (MOE) is the new partner along with the Ministry of Agriculture which has been, for the last 60 years since its founding, in charge of regenerating haitian agriculture.

In dividing the responsibilities, the MOE will take on the duties of setting up norms for combating desertification as outlined under chapter 12 of Agenda 21.

2. Capacity-Building/Technology Issues: The MOE is in a strong position for capacity building because of the international support created by the Agenda 21 framework. After surviving the Parliament's ordeal, the MOE has been working toward the partnership with the Ministry of Agriculture as well as its own Agenda 21 guidelines.

3. Major Groups: NGOs are the most important groups dealing with desertification problems in Haiti.

4. Finance: Funding in this area can only come from either national NGOs or international organizations.

5. Regional/International Cooperation: Combating desertification is one of the areas where most cooperation exists, either regionally or internationally. More precisely, the signing and ratification of the "International Convention to Combat Desertification" will open the way to many institutional advantages as well as funding.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 199_	
Land affected by desertification (Km^2)				
Other data				

AGENDA 21 CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT:

Fragile ecosystems seem to be the rule in a country as mountainous as Haiti. Mountain agriculture becomes vital so that future generations can inherit a rehabilitated ecosystem.

Cross-Sectoral Issues

1. Decision-Making Structure: The MOE and the MOA remain the proper decision making structure, until the Organic Law of the MOE is passed.

2. Capacity-Building/Technology Issues: The MOE and MOA are developing new relations through technical commissions and also through official agreements between the two ministers.

3. Major Groups: The NGOs, private and religious institutions and the local collectives remain the key partners in this area.

4. Finance: International funding compensates for the low level of governmental funding. NGOs also contribute significantly.

5. Regional/International Cooperation: Funding from regional International Organizations has been requested for managing fragile ecosystems like Haiti's.

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT:

Haitian officials including the Prime Minister and the President have consistently promoted sustainable agriculture and rural development.

The NEAP process has also included this issues as one requiring a thematic consultant. The appropriate report has not yet been drafted, but the MOE has placed high expectations on the recommendations on the matter.

Cross-Sectoral Issues

1. Decision-Making Structure: The Ministry of Agriculture is the ministry primarily responsible for agriculture and rural development in Haiti. The national legislation covering agriculture and rural development includes laws that are under revision. The Ministry of Environment is working on norms for agricultural waste recycling and on sustainable mountain agriculture.

2. Capacity-Building/Technology Issues: No information.

3. Major Groups: The NGOs--private, youth and women's organizations--are very engaged in this field and literally flood the MOE with project proposals.

4. Finance: Most financing come from caribbean and international organizations.

5. Regional/International Cooperation: All funding sources, either from Latin America, North America or Europe as well as multilateral funding (World Bank, IDB, FAO, etc) have been considered.

STATISTICAL DATA/INDICATORS

	1985	1990	Latest 199_	
Agricultural land (Km^2)			13,042	
Agricultural land as % of total land area			47%	
Agricultural land per capita				
	1989/90	**1992/93**	**Latest 199_**	
Consumption of fertilizers per Km^2 of agricultural land as of 1990			0,17	
Other data				

AGENDA 21 CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

NATIONAL PRIORITY:

STATUS REPORT:

Convention on Biological Diversity has been ratified.

The MOE has made biological diversity an important theme within the NEAP, first by ratifying the convention and second with the designation of a special biological diversity theme within the NEAP. A third step is the Organic Law which proposes a Division of Biological Diversity.

Convention on International Trade in Endangered Species of Wild Fauna and Flora

Additional comments relevant to this chapter

The island of Haiti possesses one of the highest biodiversity indices in the tropics and thus is known to have a great variety of genes, species and ecosystem, both flora and fauna:

a. the Pic Macaya, for example, has been designated as a "Reserve of the Biosphere". The MOE has encouraged the creation of a botanical garden there.
b. the pine tree called "Pinus haitianus" is found mostly in the Dominican Republic.
c. the "Haitian crocodiles" are found now only in four tiny places at la Gonave, in the south at the dominican border.
d. a rare variety of palm tree "Carossier or Petit Coco--Attalea crassispatha" is found in the south peninsula.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The NEAP proposes that such a theme be developed by a thematic consultant. The MOE will have the final responsibility to implement the NEAP which is the result of the national process.

2. **Capacity-Building/Technology Issues:** The capacity building and technology issues will be a function of the requirements of the Convention on Biological Diversity.

3. **Major Groups:** The ecological groups and the NGOs make their own environmental orientation. They will need proper guidance by the MOE, after publication of the NEAP.

4. **Finance:** Financing will be obtained from the convention sources once it is ratified. The NEAP will also identify other sources of funding for key projects.

5. **Regional/International Cooperation:** The CITES is the controlling convention for all regional and international action.

STATISTICAL DATA/INDICATORS

	1992	Latest 199_
Protected area as % of total land area		2%
	1990	Latest 199_
Number of threatened species		52

Other data
Number of bird species threatened: 13

AGENDA 21 CHAPTER 16: ENVIRONMENTALLY SOUND MANAGEMENT OF BIOTECHNOLOGY

NATIONAL PRIORITY:	
STATUS REPORT: Although biotechnology is not a priority item in the country as yet and although its management is not included in the NEAP's themes, the MOE will realize on an as-needed basis a study of the potential or feasibility of the use of biotechnology, within the safety norms already existing elsewhere.	

Cross-Sectoral Issues

1. **Decision-Making Structure:** No university is as yet involved in such research. Risk assessment and future research shall be considered by the Ministry.

2. **Capacity-Building/Technology Issues:** No information.

3. **Major Groups:** No information.

4. **Finance:** It is more than likely that some private funding will be available to the public and private universities for small biotechnology research.

5. **Regional/International Cooperation:** Regional and mostly international cooperation will eventually be required.

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 17: PROTECTION OF THE OCEANS, ALL KINDS OF SEAS, INCLUDING ENCLOSED AND SEMI-ENCLOSED SEAS, AND COASTAL AREAS AND THE PROTECTION, RATIONAL USE AND DEVELOPMENT OF THEIR LIVING RESOURCES

NATIONAL PRIORITY: **VERY HIGH**

STATUS REPORT:

The UN Convention on the Law of the Sea has been signed.

See also the attached tables on the next pages.

Marine pollution is watched carefully by the MOE. So far three cases have been documented in the last two years.

The MARPOL convention was the subject of a well-publicized seminar organized by the MOE in collaboration with the National Port Authority (APN in french). Proper lobbying has been undertaken for the ratification of the MARPOL convention by the parliament. An insular coastal area management programme has been considered with the Dominican Republic, with which Haiti share the island. But no fully integrated coastal management exists.

Financial incentives, as well as tax breaks, have been considered for encouraging the recycling of plastics.

The MOE has drafted guidelines for prior assessment of activities susceptible to having some impact on marine and coastal environment. The Ministry has been developing socio-economic and environmental indicators, updated on a yearly basis.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The MOE is in charge of any coastal area planning. Some responsibility is being shared with the Ministry of Agriculture in the absence of a formal Organic Law defining the exact role of the MOE.

2. **Capacity-Building/Technology Issues:** Haiti does not dispose of any real technology to allow scientific evaluation of marine pollution. Standard procedures in case of obvious sea pollution has been to send seawater samples and fish specimens to Miami-based labs.

3. **Major Groups:** Most NGOs grouped under an organization named HAVA, are active in the area of coastal pollution prevention.

4. **Finance:** A small amount of funding has been made available through UNDP. USAID had financed the start of NEAP to be completed in 1997-98. Larger projects are in the planning phase.

5. **Regional/International Cooperation:** International cooperation is available under the CARIFORUM established by the Lome Convention.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 199-	
Catches of marine species (metric tons)				
Population in coastal areas				
Population served by waste water treatment (% of country's total population)				
Discharges of oil into coastal waters (metric tons)				
Releases of phosphate into coastal waters (metric tons)				
Releases of nitrate into coastal waters (metric tons)				
Other data				

Chapter 17 (Oceans) Continued:

Check the boxes in the column below left:
For level of importance use:
*** = very important
** = important
* = not important
N = not relevant

Check the boxes in the column below right:
For level of implementation use:
*** = fully covered
** = well covered - gaps being addressed
* = poorly covered
O = not covered
N = not relevant

TABLE I. THE FOLLOWING ACTIVITIES HAVE BEEN CONSIDERED BY THE APPROPRIATE COORDINATING MECHANISM FOR INTEGRATED MANAGEMENT AND SUSTAINABLE DEVELOPMENT OF COASTAL AND MARINE AREAS AND THEIR RESOURCES.

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
***	a. Preparation and implementation of land and water use and siting policies.	*
**	b. Implementation of integrated coastal and marine management and sustainable development plans and programmes at appropriate levels.	*
***	c. Preparation of coastal profiles identifying critical areas including eroded zones, physical processes, development patterns, user conflicts and specific priorities for management.	*
***	d. Prior environmental impact assessment, systematic observation and follow-up of major projects, including systematic incorporation of results in decision-making.	*
***	e. Contingency plans for human induced and natural disasters.	**
***	f. Improvement of coastal human settlements, especially in housing, drinking water and treatment and disposal of sewage, solid wastes and industrial effluents.	*
***	g. Periodic assessment of the impacts of external factors and phenomena to ensure that the objectives of integrated management and sustainable development of coastal areas and marine environment are met.	*
***	h. Conservation and restoration of altered critical habitats.	*
**	I. Integration of sectoral programmes on sustainable development for settlements, agriculture, tourism, fishing, ports and industries affecting the coastal areas.	*
*	J. Infrastructure adaptation and alternative employment.	*
*	K. Human resource development and training.	*
***	L. Public education, awareness and information programmes.	*
**	M. Promoting environmentally sound technology and sustainable practices.	*
***	N. Development and simultaneous implementation of environmental quality criteria.	*

TABLE II. TECHNOLOGY (MARINE ENVIRONMENT)

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
**	A. Apply preventive, precautionary and anticipatory approaches so as to avoid degradation of the marine environment, as well as to reduce the risk of long-term or irreversible adverse effects upon it.	*
***	B. Ensure prior assessment of activities that may have significant adverse impacts upon the marine environment.	*
***	C. Integrate protection of the marine environment into relevant general environmental, social and economic development policies.	*
***	D. Develop economic incentives, where appropriate, to apply clean technologies and other means consistent with the internalization of environmental costs, such as the polluter pays principle, so as to avoid degradation of the marine environment.	*
***	E. Improve the living standards of coastal populations, particularly in developing countries, so as to contribute to reducing the degradation of the coastal and marine environment.	*
***	F. Effective monitoring and surveillance within the exclusive economic zone (EEZ) of fish harvesting and transportation of toxic and other hazardous materials.	O

TABLE III. SEWAGE RELATED ISSUES

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
***	A. Sewage related problems are considered when formulating or reviewing coastal development plans, including human development plans.	**
**	B. Sewage treatment facilities are built in accordance with national policies.	O
***	C. Coastal outfalls are located so as to maintain acceptable level of environmental quality and to avoid exposing shell fisheries, water intakes and bathing areas to pathogens.	*
***	D. The Government promotes primary treatment of municipal sewage discharged to rivers, estuaries and the sea, or other solutions appropriate to specific sites.	*
***	E. The Government supports the establishment and improvement of local, national, subregional and regional, as necessary, regulatory and monitoring programmes to control effluent discharge. Minimum sewage effluent guidelines and water quality criteria are in use.	*

TABLE IV. OTHER SOURCES OF MARINE POLLUTION, THE GOVERNMENT HAS:

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
***	A. Established or improved upon, as necessary, regulatory and monitoring programmes to control emissions, including recycling technologies.	*
***	B. Promoted risk and environmental impact assessments to help ensure an acceptable level of environmental quality.	*
**	C. Promoted assessment and cooperation at the regional level, where appropriate, with respect to the input of point source pollutants from the marine environment.	*
**	D. Taken steps to eliminate emissions or discharges of organohalogen compounds from the marine environment.	O
***	E. Taken steps to eliminate/reduce emissions or discharges or other synthetic organic compounds from the marine environment.	*
*	F. Promoted controls over anthropogenic inputs of nitrogen and phosphorous that enter coastal waters where such problems as eutrophication threaten the marine environment or its resources.	O
***	G. Taken steps to develop and implement environmentally sound land-use techniques and practices to reduce run-off to water courses and estuaries which would cause pollution or degradation of the marine environment.	*
**	H. Promoted the use of environmentally less harmful pesticides and fertilizers and alternative methods for pest control, and considered the prohibition of those found to be environmentally unsound.	*
**	I. Adopted new initiatives at national, subregional and regional levels for controlling the input of non-point source pollutants which require broad changes in sewage and waste management, agricultural practices, mining, construction and transportation.	*
***	J. Taken steps to control and prevent coastal erosion and siltation due to anthropogenic factors related to, inter alia, land-use and construction techniques and practices.	**

TABLE V. ADDRESSING CRITICAL UNCERTAINTIES FOR THE MANAGEMENT OF THE MARINE ENVIRONMENT AND CLIMATE CHANGE. IN ORDER TO IMPLEMENT THIS PROGRAMME AREA THE GOVERNMENT IS CARRYING OUT THE FOLLOWING ACTIVITIES:

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
**	A. Coordinating national and regional observation programmes for coastal and near-shore phenomena related to climate change and for research parameters essential for marine and coastal management in all regions.	*
***	B. Providing improved forecasts of marine conditions for the safety of inhabitants of coastal areas and for the efficiency of marine operations.	**
***	C. Adopting special measures to cope with and adapt to potential climate change and sea-level rise.	O
***	D. Participating in coastal vulnerability assessment, modelling and response strategies particularly for priority areas, such as small islands and low-lying and critical coastal areas.	O
**	E. Identifying ongoing and planned programmes of systematic observation of the marine environment, with a view to integrating activities and establishing priorities to address critical uncertainties for oceans and all seas.	*
*	F. Research to determine the marine biological effects of increased levels of ultraviolet rays due to the depletion of the stratospheric ozone layer.	O
*	G. Carrying out analysis, assessments and systematic observation of the role of oceans as a carbon sink.	O

TABLE VI. RATING OF ACTIVITIES IN THE AIR AND MARITIME TRANSPORT SECTORS IN THE SMALL ISLANDS DEVELOPING STATES (SIDS)

AIR TRANSPORT	RATING	MARITIME TRANSPORT	RATING
1. Frequency (external flights)	2	1. Frequency (external shipping)	3
2. Frequency (in-country flights)	3	2. Frequency (in-country shipping)	4
3. Cooperation at regional level in air transport and civil aviation	5	3. Cooperation at regional level in shipping	6
4. Cooperation at international level	6	4. Cooperation at international level	7
5. Economic viability of national air line	4	5. Economic viability of national shipping line(s)	2
6. Economic viability of regional air line	7	6. Economic viability of regional shipping line (s)	5
7. national level training in skills for air transport sector	8	7. National level training in skills for maritime transport sector	8
8. Access to training in skills for air transport sector within the region	1	8. Regional level training in skills for maritime transport sector	1
9. Access to international training for air transport sector	9	9. Access to international training for maritime transport sector	9
10. Supportive of ICAO	10		

AGENDA 21 CHAPTER 18: PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES: APPLICATION OF INTEGRATED APPROACHES TO THE DEVELOPMENT, MANAGEMENT AND USE OF WATER RESOURCES

NATIONAL PRIORITY:	HIGH	

STATUS REPORT:

Only 20% of the haitian population were served by public waterworks in 1995. The percentages are higher in the cities, about 30%. In Port-au-Prince, with a population of almost 2 million, 25% of the population use public fountains or wells only.

The MOEs proposed Organic Law contains provision for a National Service for Water Resources.

The overall use of latrines and septic tanks sets up some underground water pollution problems since no sanitary sewers exist in Haiti.

The NEAP process will suggest the implementation of an appropriate integrated solution to the development, management and use of water resources.

Cross-Sectoral Issues

1. Decision-Making Structure: The MOE, created in 1995, does not as yet have the authority for national water management. The MOE will deal mostly with the drafting and implementation of water production and management norms. Meanwhile, existing water agencies dealing with water supply in Port-au-Prince (CAMEP) all other towns (SNEP) and rural areas (POCHEP) use their own monitoring and statistical systems. With the implementation of Territorial Municipalities law, it is foreseen that duties related to this sector will be taken over by the local communities called CASECS.

2. Capacity-Building/Technology Issues: The MOE will implement proposals for education in the sustainable use of water resources as part of the Environmentally Related Education Programme (ERE). The proposed MOE's organic law prescribes the integration of a National Water Resources Service originating from the Agriculture Ministry.

3. Major Groups: Most NGOs are involved in supplying water to the rural population while taking care of environmental or sanitation problems.

4. Finance: Financial costs are supported by the local NGOs and by international organizations dealing with the water sector.

5. Regional/International Cooperation: The MOE has been using all available sources of cooperation from the caribbean, including the Dominican Republic.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1995
Fresh water availability (total domestic/external in million m^3)			12,000
Annual withdrawal of freshwater as % of available water			10%

Other data
/Water Use in Millions of Cubic Metres: Port-au-Prince: 36,0.
Other Towns: 26,0
Rural Areas: 1818,0

AGENDA 21 CHAPTER 19: ENVIRONMENTALLY SOUND MANAGEMENT OF TOXIC CHEMICALS, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN TOXIC AND DANGEROUS PRODUCTS

NATIONAL PRIORITY:

STATUS REPORT:

Haiti has tried to live by the Agenda 21 recommendations by starting on the right foot. As a result, the MOE since its creation in 1995 with the return of the democratic process, has tried to manage toxic chemicals in the country and to set up criteria for the import of dangerous products. It has participated in the follow-up of the site cleanup at the Gonaives harbor where industrial wastes from Pennsylvania were dumped in 1988.

The Ministry of Foreign Affairs, the Ministry of Commerce, the Ministry of the Interior and the Ministry of Public Health have been transmitting to the MOE for official advice all communication involving new chemicals that would be imported into Haiti.

Cross-Sectoral Issues

1. Decision-Making Structure: The MOE has been, since its creation in 1995, the key agency dealing with hazardous waste problems in Haiti. The historical experience of 1987 with the toxic chemical wastes dumped in Gonaives harbor made the haitian public very weary of illegal dumping of wastes. One recent case, that of a boat carrying thousands of used tires, was watched carefully by the MOE which called upon the national police and the UN military force to stop the unloading.

2. Capacity-Building/Technology Issues: A special Service for Control of Pollution and Waste Management has been established under the Division of Quality of Life and Pollution Management. Some institutional strengthening is foreseen for such a technical service. Technological issues involve the use of "best available technology" to handle air, water and land pollution.

3. Major Groups: In the area of hazardous wastes some NGOs have been very active in addition to the ecological groups. Some popular organizations are involved in the overall management of plastic containers. The burning of plastic, for example, has been targeted with street posters by an organization named COHPEDA.

4. Finance: Financing by the government is very limited; the most important source of financing remains international funding.

5. Regional/International Cooperation: Haiti has ratified the Basel Convention and will take advantage of the international provisions of this convention. Regional and international funding has been researched for the MOE, in order to deal with the institutional gap in human resources.

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 20: ENVIRONMENTALLY SOUND MANAGEMENT OF HAZARDOUS WASTES, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN HAZARDOUS WASTES

NATIONAL PRIORITY:

STATUS REPORT:

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was ratified in 1996.

Additional comments relevant to this chapter

Most of the hazardous wastes in Haiti come from the plastic materials which litter the streets, clog the stormwater drains and pollute the seas, reaching even the coasts of Cuba. Norms are being written and legislation drafted to handle this crisis. Rules like "Polluter Pays" are being considered. The latest proposals by local recyclers called for confection of plastic equipment used in erosion control and plant protection and watering. Some international funding is required to deal with the plastics problem.

The overall aim is to promote sustainable development through rational use of natural resources and by preventing and abating such dangers and inconveniences that waste may cause to human health and the environment. The waste generated shall be recycled or properly treated and disposed of. Recovery and recycling should be the first action, a second alternative is conversion to energy.

Waste management should be based on the best economically available techniques and on sound practices for abating environmental and health problems.

Cross-Sectoral Issues

1. **Decision-Making Structure:** Since 1997, the local governments and the mayoral institutions are the bodies primarily responsible for waste management. The Ministry of Environment will only prepare guidelines for collection, disposal and treatment. The MOE is preparing, as priority, the following guidelines:
   - Directive on emissions from incineration of municipal waste
   - Directive on the use of sewage sludge in agriculture
   - Directive on landfill requirements
   - Directive on arrangements concerning packaging and packing waste
   - Directive on compost preparation

2. **Capacity-Building/Technology Issues:** No information

3. **Major Groups:** Local municipalities are taking over garbage collection since the beginning of 1997.

4. **Finance:** No information

5. **Regional/International Cooperation:** No information

STATISTICAL DATA/INDICATORS

	1980	1987	Latest 199-	
Generation of hazardous waste (t)		0		
Import of hazardous wastes (t)**		1,500		
Export of hazardous wastes (t)		0		
Area of land contaminated by hazardous waste (km^2)		0.6		
Expenditure on hazardous waste treatment (US$)				

Other data ** This is a case of international pollution of industrial ashes deposited in the harbour of Gonaives (see Chapter 19).

AGENDA 21 CHAPTER 21: ENVIRONMENTALLY SOUND MANAGEMENT OF SOLID WASTES AND SEWAGE-RELATED ISSUES

NATIONAL PRIORITY:

STATUS REPORT:

The Haitian Ministry of the Environment has estimated that approximately 1,600 tons of waste are produced daily in Port-au-Prince. The average recovery rate of material or energy is about 12%.

The main disposal method for municipal waste is landfills. In 1995 there were a total of 10 active landfills for municipal solid waste in the country. Municipal solid waste from urban areas is collected by compacting trucks covering specific dumping collection. The system serves most of the population, incluuding the slums.

According to the MOE the implementation of waste legislation will ensure that most of the requirements set in Chapter 21 can be fulfilled in Haiti by the year 2004.

Cross-Sectoral Issues

1. **Decision-Making Structure:** See chapter 20

2. **Capacity-Building/Technology Issues:** No Information

3. **Major Groups:** Local municipalities are taking over garbage collection.

4. **Finance:** No information

5. **Regional/International Cooperation:** No information

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1996	
Generation of industrial and municipal waste (t) (1600 T/day)			1,600	
Waste disposed(Kg/capita)			1.0	
Expenditure on waste collection and treatment (US$) Port-au-Prince monthly			270,000	
Waste recycling rates (%)			12%	
Municipal waste disposal (Kg/capita)			8.0	
Waste reduction rates per unit of GDP (t/year)				
Other data				

AGENDA 21 CHAPTER 22: SAFE AND ENVIRONMENTALLY SOUND MANAGEMENT OF RADIOACTIVE WASTES

NATIONAL PRIORITY:

STATUS REPORT:

No real involvement in the radioactive or nuclear field can be foreseen in haiti except for preventive measures against the introduction of such materials or waste in the country. Article 281 of the constitution prohibits the introduction of any toxic materials into Haiti.

A recent survey of the disposal of hospital wastes did not reveal specific pollution by radioactive equipment, like X-ray machines. The users of such equipment are protected as required. Disposal of X-ray equipment is not generally contemplated due to their cost and proper maintenance and repair are still done on site.

Cross-Sectoral Issues

1. Decision-Making Structure: The MOE takes care of the management of radioactive materials. No involvement with nuclear materials is predicted. As prescribed by the Constitution, no nuclear waste can be introduced into the country.

2. Capacity-Building/Technology Issues: Not applicable

3. Major Groups: Not applicable

4. Finance: Not applicable

5. Regional/International Cooperation: The MOE votes against the proliferation of nuclear materials or weapons in international fora.

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTERS 23-32: MAJOR GROUPS

The role of major groups are also covered under the various chapters of Agenda 21. The following is a summary of main objectives outlined in Agenda 21. Please check the appropriate boxes and describe briefly any important steps or obstacles.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS	
Ch. 24: GLOBAL ACTION FOR WOMEN TOWARDS SUSTAINABLE AND EQUITABLE DEVELOPMENT. The Convention on the Elimination of All Forms of Discrimination Against Women was ratified on October 8, 1982 **24.a** Increasing the proportion of women decision makers. The percentage of women in government rose from 20% in 1992 to 33% in 1996; at the local government level it went from 25% to 37% in the same period while in parliament the percentage stayed at 3%. **24.b** assessing, reviewing, revising and implementing curricula and other educational material with a view to promoting dissemination of gender-relevant knowledge. Curricula and educational material are being revised. **24.c and 24.d** formulating and implementing policies, guidelines, strategies and plans for achievement of equality in all aspects of society including issuing a strategy by year 2000 to eliminate obstacles to full participation of women in sustainable development. Policies/strategies etc. are being drawn up. **24.e** establishing mechanisms by 1995 to assess implementation and impact of development and environment policies and programmes on women Mechanisms are being developed. **Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):** An additional convention, that of Belem Dopara in Brazil, dealing with violence against women has been ratified on April 3, 1996. A Ministry of Women's Affairs and Women's Rights was established on 10 November, 1995. A 5 Year plan called "Offensive 2001" has been drawn up. The Ministry has faced financial constraints due to a lean budget allocation and problems with the Parliament calling for its elimination. Should it survive, the Ministry would still face strong societal misunderstanding, which is deeply rooted in haitian culture and requires intersectoral dialogue for its elimination.	

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 25: CHILDREN AND YOUTH IN SUSTAINABLE DEVELOPMENT.

25.a establishing processes that promote dialogue between the youth and government at all levels and mechanisms that permit youth access to information and opportunity to present their views on implementing A21.

Name relevant youth fora:

1. National Forum with private and public institutions (December 1996)
2. Departmental Forum for Synthesizing basic youth priorities.
3. Communal Forum to identify 3 most important national and local problems.
4. Youth workshop for World Youth Day

Describe their role in the national process: Ad hoc.

25.b reducing youth unemployment: No Information

25.c ensuring that by year 2000 more than 50% of youth -- gender balanced -- have access to appropriate secondary education or vocational training.

The goal in Agenda 21 will be reached by the year 2004.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

Children and Youth have become so important in the haitian sustainable development process that a full Secretary of State has been devoted to them. Called the "Youth and Sports Secretary of State", it has catalyzed many programs dedicated to this sector of society. Besides receiving its full share of the education sector within the Ministry of Education, haitian youth is the object of the important forums mentioned above, in sport, tourism, in education in health protection and in child abuse protection.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 26: RECOGNIZING AND STRENGTHENING THE ROLE OF INDIGENOUS PEOPLE AND THEIR COMMUNITIES.

26.a establishing a process to empower indigenous people and their communities -- through policies and legal instruments: No information.

26.b strengthening arrangements for active participation in national policies

No information.

26.c involving indigenous people in resource management strategies and programmes at the national and local level.

No information

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

No information

Ch. 27: STRENGTHENING THE ROLE OF NON-GOVERNMENTAL ORGANIZATIONS: PARTNERS FOR SUSTAINABLE DEVELOPMENT.

27.a developing mechanisms that allow NGOs to play their partnership role responsibly and effectively.
27.b reviewing formal procedures and mechanisms to involve NGOs in decision making and implementation.
27.c promoting and allowing NGOs to participate in the conception, establishment and evaluation of official mechanisms to review Agenda 21 implementation.

Mechanisms are planned and NGO inputs are ad hoc.

27.d establishing a mutually productive dialogue by 1995 at the national level between NGOs and governments. The goal is set for 1998.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

No information.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 28: LOCAL AUTHORITIES' INITIATIVES IN SUPPORT OF AGENDA 21.

28.a encouraging local authorities to implement and monitor programmes that aim to ensure participation of women and youth in local decision making.

The Government plans to support local Agenda 21 initiatives.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

The MOE maintains special relations with:
1. Ecological groups with more than 10 years in existence like FAN (Friends of Nature Federation), and FREN (Federation for the Restoration of Nature).
2. New ecological associations are growing out of the popular movement of the 1990s. At a 1996 ecolocial forum more than 50 ecological associations were present.

Ch. 29: STRENGTHENING THE ROLE OF WORKERS AND THEIR TRADE UNIONS.

29.a full participation of workers in implementation and evaluation of A21.

29.b (By year 2000, (a) promoting ratification of ILO conventions; (b) establishing bipartite and tripartite mechanism on safety, health and sustainable development; (c) increasing number of environmental collective agreements; (d) reducing occupational accidents and injuries; (e) increasing workers' education and training efforts.

The ILO Conventions will be ratified by the year 2000 and workers do take some part in National Agenda 21 discussions/implementation.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

With the preparation of the National Environmental Action Plan (NEAP) some workers took part in the MARP process.

30: STRENGTHENING THE ROLE OF BUSINESS AND INDUSTRY.

30.a increasing the efficiency of resource use, including reuse, recycling, and reduction of waste per unit of economic output.

No information.

30.b encouraging the concept of stewardship in management and use of natural resources by entrepreneurs.

List any actions taken in this area:

30.c increasing number of enterprises that subscribe to and implement sustainable development policies.

2 big enterprises and 38 small and medium sized enterprises have adopted sustainable development policies.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

40 Construction Enterprises have been participating in a travelling or mobile seminar on the Impact of Construction on the Environment. These enterprises (small and medium) by haitian standards have been exposed to sustainable development policies and they have seemed willing to adopt such principles on an as-needed basis and in relation to the suggested norms from the Ministry of Environment.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 31: SCIENTIFIC AND TECHNOLOGICAL COMMUNITY.

31.a improving exchange of knowledge and concerns between s&t community and the general public.

There is some effort in this direction.

31.b developing, improving and promoting international acceptance of codes of practice and guidelines related to science and technology and its role in reconciling environment and development.

Brief comments on this chapter not already described in chapter 35 (maximum 100 words) (please, do not exceed this page):

The MOE has been studying guidelines for Environmental Impact Evaluations (EIE).
With regard to new products being imported into Haiti, the MOE has considered the technological research done, published and adopted by developed countries.

Ch. 32: STRENGTHENING THE ROLE OF FARMERS.

32.a promoting and encouraging sustainable farming practices and technologies.

For example, mountain agriculture receives adequate publicity and governmental support.

32.b developing a policy framework that provides incentives and motivation among farmers for sustainable and efficient farming practices.

The territorial municipalities act will more than likely promote decentralization and the importance of local farmers, with their practices, their land problems and their mountainous agriculture.

32.c enhancing participation of organizations of farmers in design and implementation of sustainable development policies.

The GOH has developed an appropriate agrarian reform in order to encourage land maintenance and to fight erosion. This reform will concern lands belonging to the State that have been the object of constant disputes through the years.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

AGENDA 21 CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS

Financial resources and mechanisms are also covered under each sectoral chapter of Agenda 21 where relevant. This summary highlights broader national financial policies, domestic and external (including ODA)

NATIONAL PRIORITY: VERY HIGH

STATUS REPORT:

The MOE's Organic Law will be presented to the Parliament in 1997. The GOH supports either bilaterally or multilaterally various basic needs programmes implemented jointly with the local population in fields involving ecologically sustainable production methods, water supply and sanitation, education, agriculture and forestry.

With the financial help from the international community, the GOH has implemented basic needs programmes with local population support. The NGO's have been mostly involved in fields dealing with ecologically sustainable production methods like potable water supply and sanitation, education, agriculture and forestry.

CHANGES IN NATIONAL BUDGET TO ADDRESS SUSTAINABLE DEVELOPMENT:

The creation of the Ministry of Environment, in 1994, was a change in the Government. The budget of the MOE was meager but it was nevertheless targeted for elimination by certain members of the Parliament.

In 1984, a study prepared at the faculty of Economic Sciences in Port-au-Prince revealed that the percentage of the "so-called" operating budget dealing-even remotely-with environmental protection was estimated at 2.5% of the 1982-1983 budget. The same ratio in the development budget dedicated to environmental problems was estimated at 7.5%. It can be surmised that there is a higher percentage of funds allocated to environmental issues but distributed through various ministries.

NEW ECONOMIC INSTRUMENTS:

ELIMINATION OF ENVIRONMENTALLY UNFRIENDLY SUBSIDIES:

ODA policy issues

STATISTICAL DATA/INDICATORS						
	1992	1993	1994	1995	1996	
ODA funding provided or received (Total US$million)						
	Average for 92-93		Average for 94-96			
Net flow of external capital from all sources as % of GDP			20%			
Other data						

AGENDA 21 CHAPTER 34: TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY, COOPERATION AND CAPACITY-BUILDING

Transfer of environmentally sound technology, cooperation and capacity-building is also covered under each sectoral chapter of Agenda 21 where relevant. This summary highlights broader national policies and actions relating to chapter 34.

NATIONAL PRIORITY:	
STATUS REPORT ON LINKS BETWEEN NATIONAL, REGIONAL AND INTERNATIONAL INFORMATION NETWORKS/SYSTEMS: The NEAP will clarify these issues. **MEANS OF IMPLEMENTATION:** The NEAP will identify this question.	

• Describe any work being undertaken at the national or local level regarding efforts to promote clean production processes and/or the concepts of eco-efficiency. These processes may include training, preferential financial arrangements, information dissemination and changes in legal or regulatory frameworks.

With the final revision of the Organic Law of the MOE, the ministry would have to define its relation with other ministries, like in the case of the Ministry of Social Affairs.

• Provide information on the adoption of environmental management systems. National reaction to environmental management system standards such as the ISO 14000 Series and others. Please note efforts made at the national level to promote their adoption and the creation of certification infrastructure in order to facilitate access to these standards to local industry.

The MOE is in touch with international entities for development of a GIS; although the MOE remains open to any other environmental management system.

• List and describe programs or work under way to facilitate the transfer of ESTs to small and medium sized enterprises. Please note efforts to facilitate access to financial resources and other transfer strategies.

The transfer of ESTs will be considered at a national workshop to be held with more than forty construction companies.

AGENDA 21 CHAPTER 35: SCIENCE FOR SUSTAINABLE DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT ON NATIONAL SCIENTIFIC KNOWLEDGE, RESEARCH NEEDS AND PRIORITIES:

The issue of human resources development is being prepared by a consultant to the NEAP process.

STEPS TAKEN TO ENHANCE SCIENTIFIC UNDERSTANDING, IMPROVE LONG TERM SCIENTIFIC ASSESSMENT, BUILDING OF CAPACITY AND CAPABILITY:

The NEAP is one important step in this direction.

STATISTICAL DATA/INDICATORS			
		Year	
Number of scientists, engineers and technicians engaged in research and experimental development	#	19--	
Total expenditure for research and experimental development (US$eq.)	$	19--	

Other data

Although some faculties, like Quisqueya and INAGHEI, give courses on the Environment, no four-year colleges offer a specific curriculum in Environment and Development. By the same token no research scientists and engineers work full time in this field. The US Census of 1990 however revealed the presence of such haitian scientists, engineers and technicians engaged in research and experimental sciences in the US. A certain number of full time research scientists in development and a number of graduates in the sciences in general have been found in the US. It is believed that a UNDP or TOKTEN project aimed at the repatriation of haitian expatriates will entice a few of these scientists to come help their country of origin.

The NEAP will address this under the appropriate issue theme.

AGENDA 21 CHAPTER 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

NATIONAL PRIORITY:

STATUS REPORT:

The MOE is charged with developing a programme of Education Related to Environment (ERE) for the public at large and for school age children in particular.

a) Reorientation of education towards sustainable development

b) Increasing public awareness

c) Promoting training

ROLE OF MAJOR GROUPS:

FINANCING AND COST EVALUATION OF THE LABOUR ACTIVITIES:

STATISTICAL DATA/INDICATORS				
	1980	1990	Latest 1995	
Adult literacy rate (%) Male			26.5	
Adult literacy rate (%) Female			32.6	
% of primary school children reaching grade 5 (1986-97)			NI	
Mean number of years of schooling			NI	
% of GNP spent on education			2.8	
Females per 100 males in secondary school			NI	
Women per 100 men in the labour force			64	
Other data				

AGENDA 21 CHAPTER 37: NATIONAL MECHANISMS AND INTERNATIONAL COOPERATION FOR CAPACITY-BUILDING IN DEVELOPING COUNTRIES

National capacity building is also covered under sectoral chapters.
Donors: You may wish to describe here how Agenda 21 has influenced your ODA policies in this area.
Developing countries: You may wish to describe any new national mechanisms for capacity building - and any changes in technical cooperation.

NATIONAL PRIORITY:	
STATUS REPORT ON NATIONAL ENDOGENOUS CAPACITY BUILDING: Description of any new national mechanism for capacity-building in the MOE will be realized under the NEAP.	

AGENDA 21 CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS

Ch. 38: Brief summary of any particular UN System response affecting this country/state:

1. The Environmental Country Monitoring Unit (ECMU) is one project where the UNDP has helped and can continue to help Haiti:

a. Through the financing of micro-projects identified by the communities themselves and recommended by the MOE;

b. Through the human resources made available to the MOE on a case-by-case basis;

c. Through the support furnished to the MOE, after specific request by the MOE for preparation of studies and reports.

2. The GEF is available to the MOE for project support. This will be specified in detail in the NEAP, under the project identification phase. The preparation of GIS maps or the feasibility of environmental maps are a few examples.

3. UNEP has been a helpful entity for the MOE and has become very adapted to the Haitian environmental sector.

AGENDA 21 CHAPTER 39: INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS

Ch. 39: International Legal Instruments are covered under the relevant sectoral chapters. This is a listing of major agreements/conventions (not already covered) entered into and relevant to Agenda 21:

NONE.

AGENDA 21 CHAPTER 40: INFORMATION FOR DECISION-MAKING

This chapter is also covered under sectoral and other chapters of this profile. The matrix below gives an overview of how national authorities rate the available information for decision making.

Rating of available data and information suitable for decision-making

Agenda 21 Chapters		Very good	Good	Some good data but many gaps	Poor	Remarks
2.	International cooperation and trade			X		
3.	Combating poverty			X		
4.	Changing consumption patterns				X	
5.	Demographic dynamics and sustainability				X	
6.	Human health			X		
7.	Human settlements				X	
8.	Integrating E & D in decision-making			X		
9.	Protection of the atmosphere				X	
10.	Integrated planning and management of land resources			X		
11.	Combating deforestation				X	
12.	Combating desertification and drought				X	
13.	Sustainable mountain development				X	
14.	Sustainable agriculture and rural development			X		
15.	Conservation of biological diversity				X	
16.	Biotechnology				X	
17.	Oceans, seas, coastal areas and their living resources				X	
18.	Freshwater resources			X		
19.	Toxic chemicals				X	
20.	Hazardous wastes	X				
21.	Solid wastes				X	
22.	Radioactive wastes		X			
24.	Women in sustainable development	X				
25.	Children and youth					
26.	Indigenous people			X		
27.	Non-governmental organizations			X		
28.	Local authorities			X		
29.	Workers and trade unions	X				
30.	Business and industry		X			
31.	Scientific and technological community			X		
32.	Farmers		X			
33.	Financial resources and mechanisms				X	
34.	Technology, cooperation and capacity-building				X	
35.	Science for sustainable development			X		
36.	Education, public awareness and training			X		
37.	International cooperation for capacity-building			X		
38.	International institutional arrangements		X			
39.	International legal instruments		X			
40.	Information for decision-making		X			

Additional Comments

As defined by the head of the Government himself, the Ministry's mandate essentially consists in:

- defining, promoting, implementing and following-up of norms aimed at environmental protection and rehabilitation, in collaboration with competent authorities.
- elaborating national policy to protect the environment (drafting of the NEAP);
- management of protected areas in collaboration with the appropriate "territorial municipalities" or the local entities;
- developing a program of Education Related to Environment (ERE) for the public at large and for school-age children in particular;
- preparing an organic law to be discussed with the other ministries.

STATISTICAL DATA/INDICATORS

	1980	1993	Latest 1995-6
Number of telephones in use per 100 inhabitants			less than 1

Other data

Most phones are in towns. In the rural areas the GOH is trying to install public services for interurban and international calls.